

at a position near the rolling-contact position between said driving side conveying roll and said driven side conveying roll;

conveying roll driving means for starting a rotation of said driving side conveying roll when said manuscript sensor has detected an arrival of said head of said manuscript;

light-electricity conversion means for carrying out light-electricity conversion of said image information per one line in a main-scanning direction of said manuscript from a side of one surface of said manuscript at said stationary reading position on a conveying route when said driving said conveying roll is started to rotate by said conveying roll driving means and said manuscript is thereby started to move toward the sub-scanning direction between said driving side and said driven side conveying rolls, said stationary reading position existing downstream of said conveying route from the rolling-contact position by a predetermined distance;

a first light source for emitting light onto said stationary reading position from a side of another surface of said manuscript opposite to said one surface thereof;

a second light source for emitting light onto said stationary reading position from a side of the same surface of said manuscript as said one surface thereof; and


light source switching control means for selectively rendering either said first light source or said second light source ON to read said image information included in said manuscript, dependent on whether said image information is defined by a reflected light reflected by said manuscript or by a transmitting light transmitting through said manuscript.


8 (Amended) An image scanner for use in reading image information, comprising:

a driving side conveying roll for conveying a manuscript including said image

~~information to be read past a stationary reading position;~~

a driven side conveying roll which is located above said driving side conveying roll and which rotates by rolling-contact with said driving side conveying roll;

 a manuscript sensor for detecting said manuscript when a head of said manuscript arrives at a position near the rolling-contact position between said driving said conveying roll and said driven side conveying roll;

 conveying roll driving means for starting a rotation of said driving side conveying roll when said manuscript sensor has detected an arrival of said head of said manuscript;

light-electricity conversion means for carrying out light-electricity conversion of said image information per one line in a main-scanning direction of said manuscript from a side of one surface of said manuscript at said stationary reading position on a conveying route when said driving side conveying roll is started to rotate by said conveying roll driving means and said manuscript is thereby started to move toward the sub-scanning direction between said driving side and said driven side conveying rolls, said stationary reading position existing downstream of said conveying route from the rolling-contact position by a predetermined distance;

a first light source for emitting light onto said stationary reading position from a side of another surface of said manuscript opposite to said one surface thereof;

a second light source for emitting light onto said stationary reading position from a side of the same surface of said manuscript as said one surface thereof;

light source selection input means for inputting whether either said first light source or said second light source should be selected, dependent on whether said image information is defined by a reflected light reflected by said manuscript or by a transmitting light transmitting

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through said manuscript, and

light source switching control means for selectively rendering either said first light source or said second light source ON to read said image information included in said manuscript, responsive to a result of selection by said light source selection input means.

Please add new claims 21-23 as follows:

OB  
-- 21. (Newly Added) An image scanner, comprising:

- DB  
a driving side conveying roll that conveys a manuscript;
- a driven side conveying roll located above said driving side conveying roll;
- a manuscript sensor that detects when said manuscript arrives at a position near the rolling-contact position between said driving side conveying roll and said driven side conveying roll;
- a conveying roll driver that rotates said driving side conveying roll when said manuscript sensor detects an arrival of said head of said manuscript;
- a light-electricity converter that converts light including image information to electricity in a main-scanning direction of said manuscript from a surface of said manuscript when said driving conveying roll rotates to move said manuscript toward a sub-scanning direction between said driving side and said driven side conveying rolls, a reading position being downstream in a conveying route from the rolling-contact position by a predetermined distance;
- a first light source that emits light onto another surface of said manuscript;
- a second light source that emits light onto said surface of said manuscript;
- a light source switching controller that selectively renders either said first light source or

~~said second light source ON to read said image information based on whether said image~~

information is defined by light reflected by said manuscript or by light transmitting through said manuscript; and

an encoder which generates a pulse every time said driven side conveying roll makes a predetermined number of rotations, and wherein said image scanner reads one line of said image information in synchronization with said pulse, said reading of said image information starting when said pulse is generated, said reading of said image information terminating when a predetermined time has passed after said pulse.- -

- - 22. (Newly Added) An image scanner, comprising:

a driving side conveying roll that conveys a manuscript including an image;

a driven side conveying roll which is located above said driving side conveying roll and which rotates with said driving side conveying roll;

a manuscript sensor that detects said manuscript when a head of said manuscript arrives at a position near a rolling-contact position between said driving side conveying roll and said driven side conveying roll;

a conveying roll driver that rotates said driving side conveying roll when said manuscript sensor detects said manuscript;

a light-electricity converter that converts light including image information to electricity in a main-scanning direction of said manuscript from a side of said manuscript when said driving side conveying roll rotates to move said manuscript in the sub-scanning direction between said driving side and said driven side conveying rolls, a reading position being downstream in a

~~conveying route from the rolling-contact position by a predetermined distance;~~

a first light source that emits light onto another surface of said manuscript;

a second light source that emits light onto said surface of said manuscript;

a light source selection inputter that inputs whether said first light source or said second light source is selected based upon whether said image information is defined by light reflected by said manuscript or by light transmitting through said manuscript;

OB a light source switching controller that selectively renders either said first light source or said second light source ON to read said image information in response to a result of said input from said light source selection inputter; and

CC an encoder which generates a pulse every time said driven side conveying roll makes a predetermined number of rotations, and wherein said image scanner reads one line of said image information in synchronization with said pulse, said reading of said image information starting when said pulse is generated, said reading of said image information terminating when a predetermined time has passed after said pulse. - -

- - 23. (Newly Added) An image scanner, comprising:

a driving side conveying roll that conveys a manuscript including an image;

a driven side conveying roll which is located above said driving side conveying roll and which rotates with said driving side conveying roll;

a manuscript sensor that detects said manuscript when a head of said manuscript arrives at a position near a rolling-contact position between said driving side conveying roll and said driven side conveying roll;

~~a conveying roll driver that rotates said driving side conveying roll when said manuscript~~  
sensor detects said manuscript;

a light-electricity converter that converts light including image information to electricity in a main-scanning direction of said manuscript from a side of said manuscript when said driving side conveying roll rotates to move said manuscript in the sub-scanning direction between said driving side and said driven side conveying rolls, a reading position being downstream in a conveying route from the rolling-contact position by a predetermined distance;

a first light source that emits light onto another surface of said manuscript;

a second light source that emits light onto said surface of said manuscript;

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a manuscript type judger which respectively renders said first and said second light sources exclusively ON based on whether said manuscript is read by light transmitting through said manuscript or read by light reflected by said manuscript based upon a comparison of respective signal levels from said light-electricity converter;

a light source switching controller that selectively renders either said first light source or said second light source ON in response to said judgement by said manuscript type judger; and

an encoder which generates a pulse every time said driven side conveying roll makes a predetermined number of rotations, and wherein said image scanner reads one line of said image information in synchronization with said pulse, said reading of said image information starting when said pulse is generated, said reading of said image information terminating when a predetermined time has passed after said pulse.- -